

PATENT CLAIMS

What is claimed is:

1. A motor control device having
 - control component (Sum1) for making available a control signal (ev), characterized by
 - a signal dividing device (B, Sum5) for dividing the control signal (ev) into at least two signal portions (evlo, evhi),
 - a signal processing device (F) with which each of the at least two signal portions (evlo, evhi) can be processed in different ways, and
 - an adder device (Sum6) for adding the differently processed signal portions for further processing.
2. The motor control device as claimed in claim 1, one of the signal portions being a higher value signal portion (evhi) and another of the signal portions being a lower value signal portion (evlo) with respect to the signal amplitude.
3. The motor control device as claimed in claim 2, the signal processing device (F) having a low pass filter in a signal path for the lower value signal portion (evlo).
4. The motor control device as claimed in claim 2 or 3, the signal processing device (F) having one or more band stops in a signal path for the lower value signal portion (evlo).
5. The motor control device as claimed in one of the preceding claims, which has a position sensor (G) and an acceleration sensor for sensing the movement of an adjustment element.

6. The motor control device as claimed in one of the preceding claims, which has a sampling device for repeatedly sampling a variable to be sensed within a time step with the acquisition of a plurality of sampled values, and for supplying an averaged sampled value in the time step as an actual variable.

7. The motor control device as claimed in one of the preceding claims, the control component (Sum1) constituting a subtraction device for subtracting an actual variable (vist) from a reference variable (vref) by making available a differential signal (ev), and the signal dividing device (B, Sum5) for dividing the differential signal (ev) being connected downstream of the subtraction device.

8. A method for controlling a motor by
- making available a control signal (ev),
characterized by
- division of the control signal (ev) into at least two signal portions (evlo, evhi),
- processing of each of the at least two signal portions (evlo, evhi) in different ways, and
- addition of the differently processed signal portions for further processing.

9. The method as claimed in claim 8, the control signal (ev) being divided into a higher value signal portion (evhi) and a lower value signal portion (evlo) with respect to the signal amplitude.

10. The method as claimed in claim 9, the lower value signal portion (evlo) being filtered with a low pass filter.

11. The method as claimed in claim 9 or 10, the lower value signal portion (evlo) being filtered with one or more band stops.

12. The method as claimed in one of claims 8 to 11, a position signal (xist) and

an acceleration signal each being sensed as an actual variable.

13. The method as claimed in one of claims 8 to 12, a variable which is to be sensed being sampled within a time step by acquiring a plurality of sampled values, and an averaged sampled value in the time step being supplied as an actual variable.

14. The method as claimed in one of claims 8 to 13, the control signal (ev) being a differential signal between an actual variable (vist) and a reference variable (vref), and this differential signal being divided into at least two signal portions (evlo, evhi).